



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B6F      BYPASS RATIO: 5.1  
 UNIQUE ID NUMBER: 1GE030      PRESSURE RATIO ( $\pi_{00}$ ): 31.8  
 COMBUSTOR:  
 ENGINE TYPE: TF      RATED THRUST ( $F_{00}$ ) (kN): 267.0

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	14.8	59.5	50.0	9.6
AS % OF ORIGINAL LIMIT	75.7	50.4	48.2	53.2
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			60.3	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			70.8	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			79.9	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			93.1	

### DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 - DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	2.540	0.07	0.52	32.16	8.2
CLIMB OUT	85	2.2	2.020	0.08	0.52	23.09	5.4
APPROACH	30	4.0	0.643	0.19	1.92	9.06	2.3
IDLE	7	26.0	0.196	9.74	43.89	3.75	3.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			834	3041	13931	12134	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				11.4	52.2	45.4	8.2
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				1.2	2.8	2.0	1.4
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				10.37-12.53	49.76-54.85	43.9-47.85	6.3-8.9

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-97.8
TEMPERATURE (K)	287-296
ABS HUMIDITY (kg/kg)	0.0084-0.014

### FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company  
 TEST ORGANIZATION: CF6 Eval Engineering  
 TEST LOCATION: Site IIIC, PTO, Peebles, Ohio  
 TEST DATES: 29/05/1985-03/06/1985

### REMARKS

1. Ref GE Report R88AEB277.
2. Engine S/N's 690105 and 690005/2.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)